

Duke Power Company
McGuire Nuclear Generation Department
12700 Hagers Ferry Road (MG01A)
Huntersville, NC 28078-8985

T. C. McMEEKIN
Vice President
(704)875-4800
(704)875-4809 FAX



DUKE POWER

January 30, 1992

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

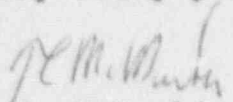
Subject: McGuire Nuclear Station Unit 2
Docket No. 50-370
Diesel Generator Special Report

Gentlemen:

Pursuant to McGuire Technical Specifications 4.8.1.1.3.c and 6.9.2, find attached a special report concerning a valid failure of Diesel Generator 2A.

Should there be any questions, please contact Terry Pedersen at (704)875-4487.

Very truly yours,


T.C. McMeekin

NGA/bcb

Attachment

xc: Mr. S.D. Ebnetter
Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta St., NW, Suite 2900
Atlanta, GA 30323

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, GA 30339

Mr. Tim Reed
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Mr. P.K. Van Doorn
NRC Resident Inspector
McGuire Nuclear Station

9202030178 920130
PDR ADDCK 05000370
S PDR

JE22

DUKE POWER COMPANY
McGUIRE NUCLEAR STATION

Diesel Generator Special Report
PIR 2-M91-0213
January 24, 1992

On December 31, 1991, at 0927, diesel generator (DG) 2A tripped 15 seconds after reaching 95% speed due to a "Low Lube Oil Pressure" indication during a routine surveillance test (PT/2/A/4350/02A, Diesel Generator 2A Operability Test). Work Request 146375 was initiated and the start attempt (#856) was classified as a Valid Failure because the trip would not have been bypassed during an emergency start.

This was the second Valid Failure in the last 20 Valid Tests and the fourth Valid Failure in the last 100 Valid Tests for DG 2A. On a unit basis, this is the third Valid Failure in the last 100 Valid Tests of DGs 2A and 2B combined. Surveillance test frequency increases from monthly to weekly per Technical Specification Table 4.8-1 (Diesel Generator Test Schedule).

The trip was due to a slower than normal pressure buildup at the lube oil pressure switches (2LDPS5120 and 2LDPS5123). Fifteen seconds after 95% engine speed was reached, timing relay ARR timed out and the trip occurred because the pressure switches had not yet cleared. The Operator also noted that the lube oil pressure rise was slower than normal as observed from the local control panel pressure gauge.

Investigation revealed that the root valve to the pressure switches was partially clogged with grit. This grit is residual from sand contamination of the lube oil system that was discovered in 1985. The root valve and associated tubing were cleaned in 1985 but the grit has apparently since built up in the root valve. A modification was made to the lube oil system in 1990 to add a full-flow lube oil filter. This filters all of the oil going to the engine and instrumentation to 5 microns. This should prevent future buildup of the grit. The pressure to the engine was normal throughout the event.

Immediate corrective action involved cleaning out the root valve (and tubing) and checking for leaks (none were found). Start #857 verified that the oil pressure rise was normal. Then start #858 was initiated (12/31/91 at 1532) to perform the operability run. Work requests were written on all four DGs to blow out all of the lube oil and fuel oil tubing. Periodic maintenance activities will be setup on all DGs on a two year frequency to blow out the tubing and root valves.

Rodney M. Roberts
R.M. Roberts
System Engineering